WHAT IS CLAIMED IS:

1. A wireless terminal device comprising:

a wireless interface part having an interface with a wireless transmission path at a physical layer;

a link forming part accessing the wireless transmission path via the wireless interface unit and forming a particular link on the wireless transmission path; and

a transmission/reception part transmitting and/or receiving transmission information via the particular link formed by the link forming part,

the wireless transmission path being formed as a physical channel to which a CSMA system is applied, the CSMA system securing a given transmission quality with respect to a total of the number of links concurrently formable and the amount of the transmission information,

the link forming part forming the particular link on the wireless transmission path when initiated.

2. The wireless terminal device as claimed in claim 1, wherein the link forming part captures resources of a single or a plurality of upper layers including a data link layer in accordance with the physical layer of the wireless transmission path at the time of forming the particular link.

3. The wireless terminal device as claimed in claim 1, further comprising a transmission information monitoring part for monitoring, for each link, the amount of the transmission information handled by the transmission/reception part, or an increasing rate of the amount of the transmission information,

the link forming part changing, as to the particular link formed in advance, a transmission capacity to a value which ensures a predetermined transmission quality in accordance with the amount of the transmission information or the increasing rate monitored by the transmission information monitoring part, and alternatively substituting another link having another transmission capacity greater than that of the particular link.

4. The wireless terminal device as claimed in claim 1, further comprising a man-machine interface part providing, based on a man-machine interface, an input which requests to change the transmission capacity of the particular link formed by the link forming part in advance or to substitute another link for the particular link,

wherein, when said input is provided by the man-machine interface part, the transmission capacity of the particular link formed in advance is changed to a value which ensures a given transmission quality, or the particular link is replaced by said another link having a transmission capacity greater than that of the particular link.

5. The wireless terminal device as claimed in claim 1, further comprising a physical channel monitoring part monitoring one or both of a degree of congestion in a physical channel and a frequency of occurrence of a collision in the physical channel in CDMA,

wherein the link forming part replaces the particular link by another link ensuring a given transmission capacity on the basis of said one or both of the degree of congestion in the physical channel and the frequency of occurrence of a collision in the physical channel.

6. A node device comprising:

a wireless interface part having, at a physical layer, an interface with wireless transmission paths via which wireless terminal devices are accommodated;

a link forming part forming, in accordance with a connectionless communication sequence, individual links respectively corresponding to the wireless terminal devices via the wireless interface parts; and

a transmission/reception part transmitting and/or receiving desired transmission information via the individual links formed by said link forming part.

7. The node device as claimed in claim 6, further comprising a transmission information monitoring part which monitors, for each of the

individual links, the amount of transmission information received by the transmission/reception part or an increasing rate of the amount of the transmission information received,

wherein the link forming part changes, for each of the individual links formed in advance, a transmission capacity to a value which ensures a predetermined transmission quality in accordance with the amount of the transmission information or the increasing rate monitored by the transmission information monitoring part, and alternatively substitutes another link having another transmission capacity greater than that of a corresponding one of the individual links.

8. The node device as claimed in claim 6, further comprising a transmission information monitoring part which monitors, for each of the individual links, the amount of transmission information transmitted or to be transmitted by the transmission/reception part or an increasing rate of the amount of the transmission information,

wherein the link forming part changes, for each of the individual links formed in advance, a transmission capacity to a value which ensures a predetermined transmission quality in accordance with the amount of the transmission information or the increasing rate monitored by the transmission information monitoring part, and alternatively substitutes another link having another transmission capacity greater than that of a corresponding one of the individual links.

9. The node device as claimed in claim 6, further comprising a man-machine interface part providing, based on a man-machine interface, an input which requests to change the transmission capacity of one of the individual links formed by the link forming part in advance or to substitute another link for one of the individual links,

wherein, when said input is provided by the man-machine interface part, the transmission capacity of one of the individual links formed in advance is changed into a value which ensures a given transmission quality, or said one of the individual links is replaced by said another link having a transmission capacity greater than that of said one of the individual links.

10. The node device as claimed in claim 7, wherein the transmission information monitoring part monitors, as to one or both of transmission information transmitted or to be transmitted by the transmission/reception part and transmission information received thereby, the amount of the transmission information on a transmission unit basis, or an increasing rate of the amount of the transmission information.

11. The node device as claimed in claim 6, further comprising a physical channel monitoring part monitoring one or both of a degree of congestion in the physical channel and a frequency of occurrence of a collision in the physical channel

in CDMA,

wherein the link forming part replaces one of the individual links by another link ensuring a given transmission capacity on the basis of said one or both of the degree of congestion in the physical channel and the frequency of occurrence of a collision in the physical channel.

12. The node device as claimed in claim 6, further comprising:

a memory part which stores an amount of transmission information assigned a port number, which is added to the transmission information transmitted or received at a transport layer or a higher layer and corresponds to one or both of a transmission source of the transmission formation and a destination thereof; and

a port number monitoring part which acquires the port number added to the transmission information transmitted or received,

wherein the link forming part changes, based on the amount of transmission information stored in the memory part and related to the port number acquired by the port number monitoring part, a transmission capacity of one of the individual links formed in advance to a value which ensures a predetermined transmission quality in accordance with the amount of the transmission information or the increasing rate monitored by the transmission information monitoring part, and alternatively substitutes another link having another transmission capacity greater than that of one of the individual links.

13. The node device as claimed in claim 6, wherein, as to the particular link formed in advance, the link forming part communicates with the wireless terminal device via the wireless interface part and a wireless transmission path so that control information necessary for changing a transmission capacity or substituting another link for one of the individual links is transferred therebetween, whereby the link forming part primarily changes the transmission capacity or substitutes another link for one of the individual links.

14. The node device as claimed in claim 6, wherein the wireless terminal device is that as claimed in claim 1.